LIFE INSURANCE COMPANY OWNERSHIP OF UNITED STATES' AGRICULTURAL LAND IN 1986

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by Dave Senf

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LIFE INSURANCE COMPANY OWNERSHIP OF
UNITED STATES' AGRICULTURAL LAND, IN 1986

INTRODUCTION

Low farm income, falling land values, high real interest rates and heavy debt have, over the last five years, combined to create the worst economic conditions for United States farmers since the Depression years. The farm credit or debt crisis, as the depressed farm condition has come to be called, has significantly accelerated the rate at which farmers are leaving agriculture. While most displaced farmers have left agriculture through voluntary liquidation, many others have been forced out through involuntary liquidation or foreclosure. As foreclosures have mounted, agricultural lenders have acquired substantial amounts of farm and ranch land. In the Midwest farm belt where financial stress has been the most severe, foreclosures and farm acreage transferred to lenders have been the highest. At issue is how the growing inventory of farmland held by lenders is being managed, and what long-term effects will develop from the eventual resale of this farmland.

This report concentrates on Midwest farmland ownership by one group of major farm lenders, United States life insurance companies. As with other lenders, the life insurance industry has posted record rates of delinquent farm mortgages and foreclosures. The result has been a sharp increase in farmland held by leading farm lending life insurance companies. Total U.S. agricultural land held by the life insurance industry has increased ten-fold in value during the 1980s despite falling land values since 1982.

In the Midwest, combined 1986 farm holdings of leading insurance companies were valued at $700 million, twenty-eight times higher than the total 1979 value of $25 million. In real land value terms, using 1974 average statewide land values as a base, the increase is even more dramatic as the real value of insurance company-owned farmland in the Midwest has increased forty-fold since 1979. Top insurance companies are estimated to control more than 4 million acres of agricultural land nationwide in 1986, compared with fewer than 400,000 acres in 1979. In the twelve-state Midwest region, total industry farm acreage has expanded from less than 100,000 acres in 1979 to more than one million acres last year. The life insurance industry's farmland ownership activities and agricultural lending role are discussed in the first part of this report.

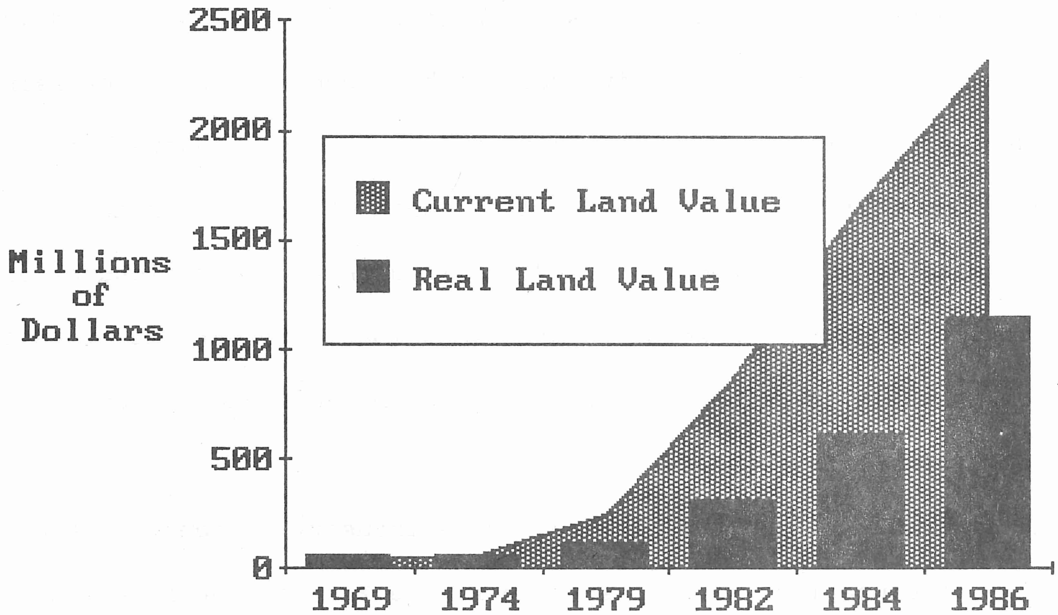
Issues being raised over the farmland inventory build-up by lenders parallel issues raised periodically in the past over absentee ownership of farmland, in particular corporate and foreign farm investments. Of immediate concern is the impact lender ownership is having on land stewardship. Since most of the acquired land is being rented, questions on adequate land stewardship (in particular proper soil conservation management) on creditor-controlled land have been raised. Aggressive selling of acquired acreage by lenders is another immediate worry as additional land on the market could keep farmland values from stabilizing. Long-term concerns center around the question of who eventually will be farming the repossessed land. The likely outcome is further concentration of farm ownership into fewer and larger farms unless specific programs promoting resale to small and moderate sized farms are instituted. Rural communities are and will continue to be adversely affected as their farm-based population shrinks. The second part of the report addresses these and related issues generated by insurance companies and other lenders expanding farmland inventories.

EXTENT OF FARMLAND OWNERSHIP OF INSURANCE COMPANIES

Unlike other farm lenders with rapid increases in farmland holdings during the credit crisis, owning farmland is not entirely new to the life insurance industry. Several life insurance companies have been actively investing in farmland since the mid-1970s. As shown in Figure 1, nationwide industry farm holdings in real land value terms nearly doubled between 1974 and 1979 following little change during the early 1970s.[1] Holdings more than doubled again between 1979 and 1982 as insurance companies led by Prudential, Travelers, and Hancock invested directly in farm real estate (see Tables A1 and A2 in the appendix).

Figure 1

U.S. Farm and Ranch Land
Held by Insurance Companies

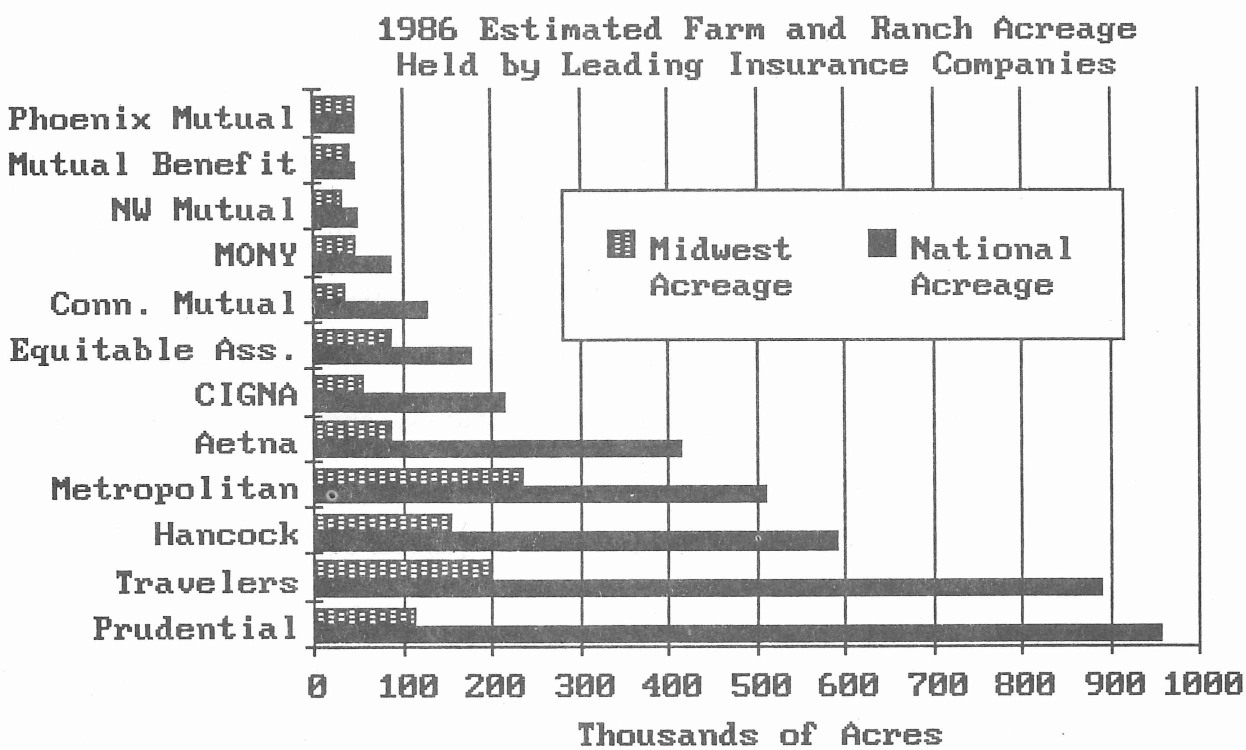


Although part of the increase in farm holdings during the early 1980s reflects increasing foreclosures, most of the land acquired during this period was direct investment. Like many farmers, insurance companies were buying farm property anticipating profits from spiraling land values and high rental rates generated by record exports and high commodity prices. By 1982 the industry held an estimated 1.4 million acres of farm and ranch land. Prudential, Travelers, and Hancock owned 80 percent of the total with large holdings in Arkansas, California, Colorado, Illinois, Indiana, Florida, Mississippi, North Carolina, and Oregon.

Since 1982 total acreage owned by leading life insurance companies has increased, on average, by nearly 30 percent each year. The estimated 4.1 million acres of farm and ranch land owned by leading insurance companies in 1986 was worth $2.3 billion. Nearly all of the increased holdings over the last few years have come through foreclosures or other means of debt satisfaction. Total industry valuation of foreclosures initiated has risen dramatically each year since 1982 as insurance companies moved to reduce losses on delinquent farm loans. Farm foreclosures by the industry, which averaged 40 per year in the 1970s, jumped to 167 in 1982 and have been steeply increasing since reaching 1,654 in 1986. Over the last five years the industry has initiated foreclosure proceedings on $2 billion worth of farm and ranch mortgages (see Table A3 in the appendix). Land acquired through foreclosures and other loan workout arrangements accounts for an estimated 65 percent of total industry holdings while the other 35 percent is estimated to have been acquired through direct investment.

Farmland ownership within the life insurance industry is concentrated among a handful of companies, as displayed in Figure 2. The top five land holding companies own 70 to 75 percent of estimated total industry holdings. Seven other companies owning between 45,000 and 215,000 acres hold an additional 20 percent of the industry's total (see Table A4 in the appendix). Other life insurance companies provide minor amounts of farm mortgages and own farm property. Farm holdings by these companies vary between a few hundred to a few thousand acres. Most of the 1982-86 data presented in this report were collected on an individual company basis, concentrating on the leading insurance companies. Consequently, industry totals reported here are estimated to cover 90 to 95 percent of total life insurance industry agricultural land holdings.

Figure 2



Acreage estimates for 1986 were based on farm real estate information reported by leading insurance companies in annual statements filed with the Minnesota Commerce Department. Of the fifteen companies identified as major farmland or farm mortgage holders, seven companies listed farm properties by value and acreage. These seven companies accounted for slightly over half of total farmland (in value terms) held by the fifteen companies and reported farmland ownership of approximately 2.4 million acres.[2]

For the other eight companies, acreage estimates were derived using several techniques. For Iowa, Wisconsin, South Dakota, North Dakota and Missouri, average 1986 value per acre by county location was calculated based on valuation, acreage, and county location listed by the seven companies. Average county acre values were then applied to farm valuations reported by the other eight companies to estimate company acreage. For properties in counties where average values were not available, 1986 statewide average acre values were used. Minnesota acreage was similarly estimated with adjustments made based on information obtained from an annual state corporate farm report.

Acreage estimates for other states were based either on 1986 statewide average acre value or, in the case of seventeen western states, on 80 percent of average acre value. Simple regression analysis of individual farm and ranch land values and acreages listed by the seven companies showed average state acre values to be reasonably accurate in matching listed and estimated acreage for non-western states. For western states, acreage estimates based on statewide value averages were consistently below reported acreage. Because of this, average 1986 state acre values were adjusted downwards by 20 percent in each of the seventeen western states.

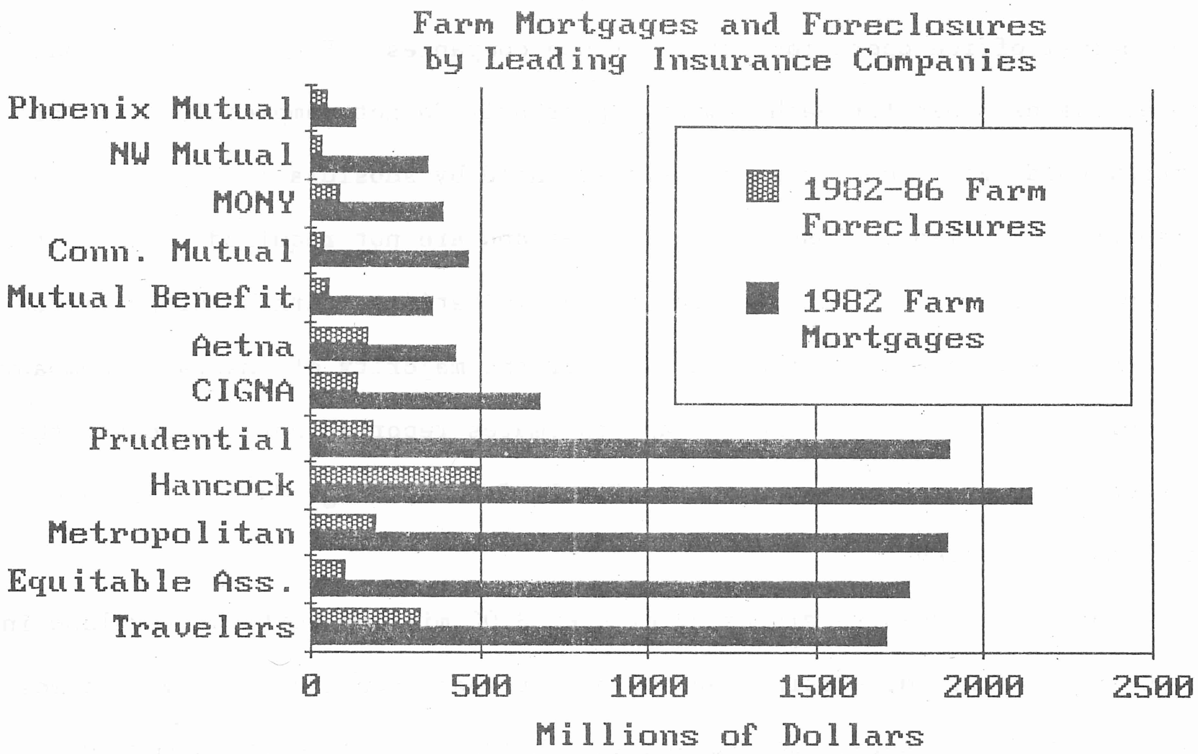
The accuracy of the estimates reported here is limited by several factors. First, land values can vary widely over a state and even within a county. Second, rapidly changing land values can quickly make either reported farm valuations or average acre values invalid for estimating acreage. Third, acreage estimates are based on farm valuation and acreage totals reported by insurance companies in their annual statements to insurance regulators. The reliability of annual statements as sources of company holdings is uncertain. To evaluate the inclusiveness and reliability of holdings listed in the annual reports, courthouse records of insurance company-owned farm acreage in fifteen

Minnesota, Iowa, and Missouri counties were compared to the holdings reported in annual statements.

In all fifteen counties, county records reported more farm holdings than listed in the annual statements. In some counties differences were minimal but in others holdings were significantly different. Several factors may account for the differences. First, even though an insurance company is listed in county records as the owner, redemption or bankruptcy proceedings may be delaying final legal transfer of farm properties. Additional delay between final title transfer and listing in annual statements may also result from normal office operations at insurance companies. Finally, the annual statements examined for each company apparently do not completely cover all company holdings. Some farm holdings are held by subsidiaries or joint partnerships controlled by insurance companies and are not required to be listed in annual statements.[3] Despite the above limitations, farm holdings listed in the annual statements are thought to cover the majority of insurance company-controlled farm acreage. The acreage estimates reported here represent the best possible estimates given the available farm holdings data released by insurance companies.

Prudential, despite disposing of over $100 million worth of farmland in Arkansas, Indiana, Mississippi and Ohio last year, continues to own the most land. A large percentage of Prudential's holdings were obtained through direct purchases in the late 1970s and early 1980s. When compared to other major farm mortgage servicing insurance companies, Prudential's foreclosure rate has been moderate. Travelers and Hancock have been the most active in foreclosing among the major lenders based on the ratio of foreclosed mortgage amount over the last five years to total value of farm mortgages held in 1982. Travelers and Hancock holdings have quadrupled and tripled, respectively, from property acquired through foreclosure. Aetna, MONY, Phoenix Mutual, and Connecticut General (CIGNA) have also been aggressive in foreclosing. Metropolitan, Mutual Benefit, Equitable Life Assurance, and Northwestern Mutual have had relatively low foreclosure rates. The first three of these companies have acquired almost all of their current farm holdings through foreclosure. Figure 3 compares 1982 mortgage volume to foreclosures over the last five years for the leading companies (see Tables A5 and A6 in the appendix).

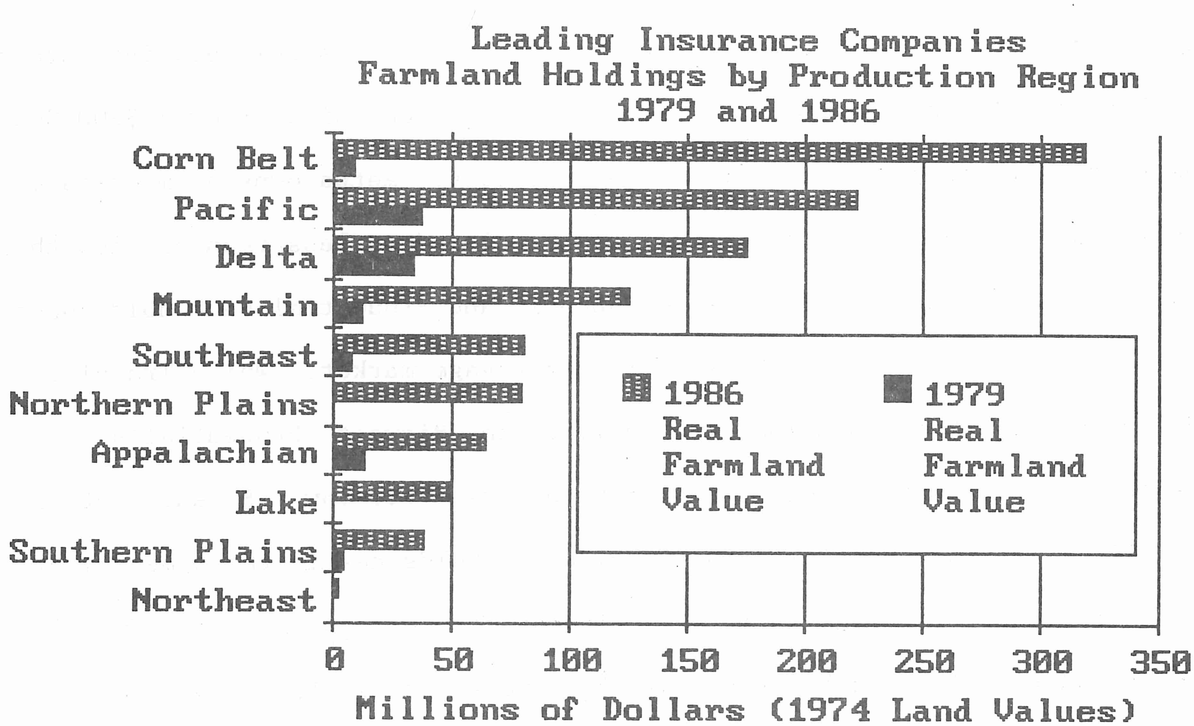
Figure 3



Insurance companies, on the whole, appear to be waiting for land values to bottom-out before actively marketing their farmland inventories. Companies are selling when terms are favorable, but are not conducting fire sales. Instead, insurance companies are renting their farm properties and the government farm payments tied to the farms at rates high enough to make holding on to them economical. Besides Prudential, only CIGNA has been selling significant amounts of farmland relative to total company holdings prior to 1987.

Although farmland acquisition by insurance companies has been heavier in some regions than others, the industry's farmland inventory boom has occurred in all regions of the country except for the northeast, where farmland values have remained relatively strong and insurance company involvement in farm real estate lending is minimal. In 1986, the industry held more than $1 million worth of farm or ranch land in each of forty states compared to nineteen states in 1979. Estimated agricultural land held by life insurance companies exceeded 40,000 acres in twenty-six states last year and over 100,000 acres in fifteen of those states. The steepest increase in farmland ownership has been occurring in the Corn Belt, Lake and Northern Plains states (the twelve states defined as Midwest states in this report), where land values have dropped the most and industry farmland holdings prior to 1979 were minor. Figure 4 summarizes regional farmland ownership trends by leading life insurance companies between 1979 and 1986.

Figure 4



Midwest farmland held by insurance companies has increased by more than one million acres since 1979, accounting for more than one-fourth of total industry farmland inventory growth during the 1980s. Between 85 to 90 percent of Midwest holdings have been acquired through foreclosure or other loan settlement methods such as deedbacks. The rate of Midwest land acquisition by insurance companies continued to increase last year. In four states (Iowa, Nebraska, North Dakota, and Wisconsin) farm acreage transferred to insurance companies last year doubled industry-held acreage. In Minnesota, Missouri, and South Dakota, insurance company-owned farm acreage increased by more than 60 percent last year.

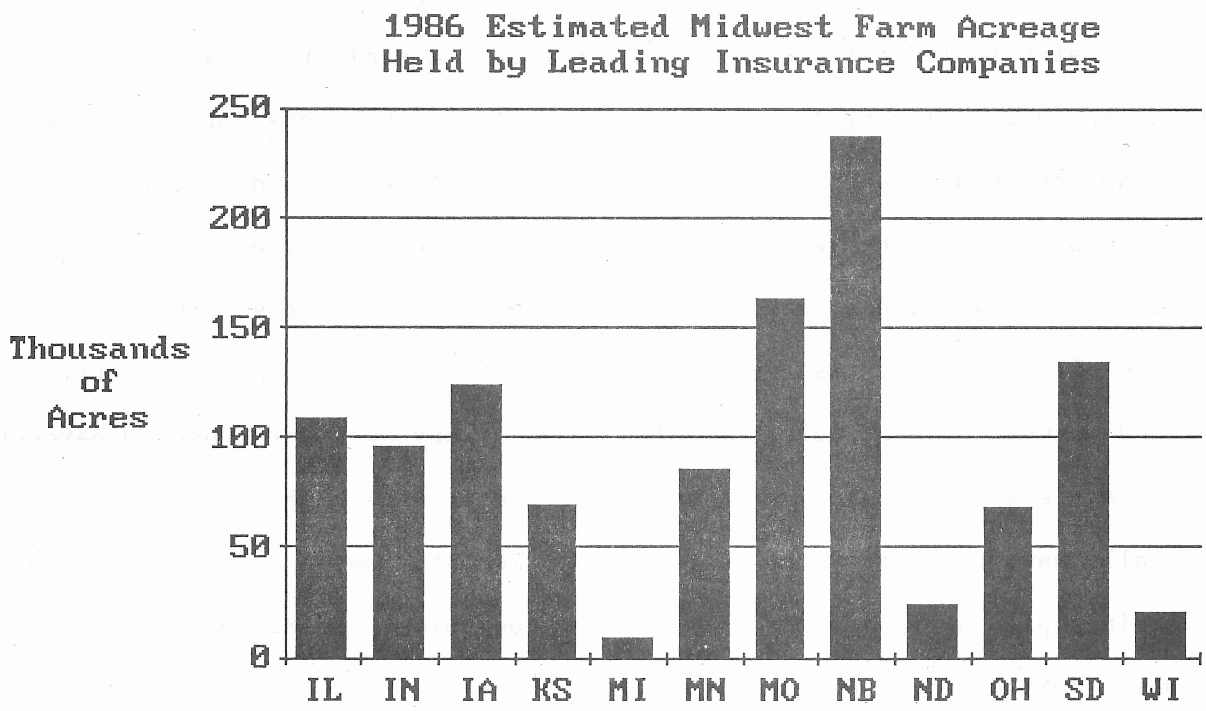
Metropolitan, with over half of its farm mortgages lent to Midwest farmers, holds 30 percent of all life insurance industry Midwest farm mortgages. It also owns the most Midwest farmland, almost all of which has been acquired through foreclosure. Equitable Life Assurance, the second largest farm mortgagee in the Midwest in terms of loan numbers, ranks fifth in Midwest farmland inventory size. Equitable's average farm loan size is smaller than the industry average, perhaps explaining its low relative rate of foreclosure. Aetna, in contrast, with an average loan size of over $800,000, appears to have lent primarily to large operators. Aetna owns as much farmland in the Midwest as Equitable but has foreclosed on less than one-fourth as many farms as Equitable. Travelers, Hancock, and Prudential each hold about 10 percent of the industry's Midwest farm mortgage market. While Travelers and Hancock have been foreclosing heavily in the Midwest, Prudential's foreclosure rate in the Midwest has been comparatively low. Phoenix Mutual, with all of its farm portfolio in the Midwest, holds nearly the same dollar amount of midwest farmland as it does midwest farm mortgages. Both Mutual Benefit and Phoenix Mutual's farm holdings are almost entirely located in the Midwest.

Direct farmland investment in the Midwest by insurance companies has been the heaviest in Illinois and Indiana over the last ten years. These two states, along with Michigan and Ohio, have no restrictions against corporate farm ownership. Limited direct farm investment in the other eight midwest states may be explained by legal restrictions. Laws prohibiting corporate farm ownership have been adopted or strengthened within the last ten years or have existed since the 1930s in these states. In North Dakota, corporate farming has been prohibited since the 1930s in response to the first great farm transfer to lenders during the Depression. A similar law was enacted in Kansas in 1931 following the failed attempt of a 65,000 acre corporate wheat farm, and has since been reinforced. The other states passed or strengthened their corporate farming laws to prevent speculative investment by corporate interests as land values escalated during the 1970s and early 1980s.

In all Midwest states, farm ownership by the life insurance industry is divided between five or more companies. No company owns more than 40 percent of a state's estimated insurance company-owned acreage. Several companies typically have title to 20 or 30 percent of industry-owned acreage with the remaining split among another four or five companies. In Missouri, for example, MONY owned 28,000 acres and Hancock owned 20,000 acres in 1986. Seven other companies owned between 10,000 and 20,000 acres. Figure 5 displays estimated farm acreage held by leading life insurance companies in each Midwest state.

A broader perspective on the dimension of life insurance company-owned farmland can be gained by comparing industry acreage with total agricultural acreage. Insurance company-held acreage accounted for four-tenths of a percent of both total U.S. agricultural acreage and total farm real estate value in 1986. The life insurance industry controls 1 percent, or slightly more of all agricultural land in Arizona, California, and Mississippi. The industry owns between a 1/2 to 1 percent of state agricultural land in fourteen other states. In the Midwest, percent of state farmland owned by insurance companies varies between six-tenths of a percent in Indiana to one-tenth of a percent in Kansas, Michigan, North Dakota, and Wisconsin (see Tables A7 and A8 in the appendix).

Figure 5



ROLE OF INSURANCE COMPANIES IN FARM MORTGAGE LENDING

Life insurance companies have long been major providers of long-term credit for farmers and ranchers as shown in Table 1. Until the late 1960s, insurance companies serviced about one-fifth of all farm real estate mortgages. Since then the industry's market share has declined to slightly over one-tenth of the market. While the industry's farm portfolio rose annually by

7 percent between 1960 and 1980, total outstanding farm mortgage volume expanded by 11 percent annually. Analysts attribute most of the industry's declining market share to supply side factors.[4] Expansion of farm mortgage funds within insurance companies have been limited by increased demand for policy loans and competition from non-farm mortgages yielding higher returns. State usury laws limiting interest changes have also been cited as a factor for the industry's shrinking role as a farm mortgage supplier.

TABLE 1

SHARE OF OUTSTANDING FARM REAL ESTATE DEBT
(EXCLUDING FARM HOUSEHOLD DEBT)
(in percents)

	Banks	Federal Credit System	Life Insurance Companies	Farmers Home Administration	Individuals and Others.
1920	14.2	4.2	11.8	--	69.9
1930	10.1	19.2	22.2	--	48.6
1940	8.4	41.8	15.6	1.0	33.1
1950	16.1	16.2	22.1	4.2	41.3
1960	12.4	19.8	23.2	5.6	38.9
1970	12.2	23.5	18.7	8.0	37.7
1980	9.0	37.8	13.6	8.0	31.6
1985	10.7	42.3	11.3	9.9	25.8

SOURCE: Agricultural Finance Databook, Division of Research and Statistics, Board of Governors of the Federal Reserve, June 1986.

In 1986 leading life insurance companies held $10.4 billion of outstanding farm mortgages spread over approximately 54,000 loans. Companies have dramatically reduced their farm portfolios during the credit crisis.

Foreclosures and curtailing of new mortgages have reduced outstanding loan numbers by 25,000 and loan volume by $2 billion since 1982. Metropolitan and Equitable Life Assurance each hold over 14,000 farm mortgages worth $1.6 billion. These two companies, along with Prudential ($1.2 billion in 7,000 loans), Hancock ($1.6 billion in 3,200 loans), and Travelers ($2.0 billion in 5,400 loans), service about 75 percent of the industry's farm mortgage customers.

Farm mortgage investments by life insurance companies are spread throughout the country. However, individual state market shares of farm mortgages held by the industry are highest in several Western and Delta states, as well as in California, Washington, Florida, Nebraska, and Texas (see Table A9 in the appendix). The industry's high market share in these states corresponds with the tendency of insurance companies to favor large farm mortgages. Farm and ranch operations in these states are typically large-scale operations requiring substantial capital funding. Even though insurance companies' farm mortgage holdings are high as a percent of total mortgages in these states, the industry's leading region of farm loans is the Corn Belt. Over 20 percent of all life insurance companies' farm mortgage volume is in the Corn Belt. This reflects the high farm numbers and farm mortgage volume in the region. When Lake and Northern Plains states farm mortgages are included, farm mortgages in the Midwest account for 35 percent of the industry's total farm portfolio and more than 60 percent of farm loan numbers (see Table A10 in the appendix).

Farm real estate and mortgages held by insurance companies account for 2 percent of total industry assets. In addition, insurance companies are active investors in other agricultural areas such as feedlots and grain elevators through bond and common stock holdings. Less than 3 percent of industry assets are directly invested in agriculture when agribusiness investments are combined with farmland and mortgage holdings. Insurance companies secure and service farm mortgages through field representatives employed directly by the companies and through farm mortgage correspondents.

As the number of foreclosures have multiplied and acquired acreage has grown, life insurance companies have added staff to their agricultural divisions and either increased the hiring of farm management firms or bought farm management firms for help in overseeing their farmland inventories. Metropolitan purchased the nation's largest farm management firm, Farmers National Company, early last year. In 1985, MONY acquired Bell Investment Company and its subsidiary, Duff Farm Mangement. Prudential acquired most of the assets of Northern Trust Agricultural Services, Inc., in 1986 and reorganized it into a subsidiary firm called Capital Agricultural Property Services, Inc. The companies, as indicated by farm management firm acquisitions, are developing the resources required to manage their acquired properties beyond just the next harvest. The additional personnel and farm management expertise also signals insurance companies' plans to stay in the farm mortgage market and perhaps to broaden their agricultural financial services.

The rapid rise in farmland acquired through foreclosures and other loan workout arrangements by insurance companies during this period of difficult financial adjustment in agriculture is not surprising given the industry's role as a major source of farm mortgages secured by farmland. By U.S.D.A. estimates, 200,000 farmers have left agriculture since 1980. The decline in farm numbers during this decade averages out to more than 2 percent annually, compared with 1 percent annually during the 1970s. Although data on farm failures, including reasons for going out of business, are incomplete, the majority of farmers getting out of agriculture are doing so through voluntary liquidation brought on by weak financial positions. The most visible group of farmers leaving agriculture, however, are the farmers being forced out through forced liquidations, foreclosure actions by lenders, or bankruptcy.

As with insurance companies, debt satisfaction actions by other lenders have turned most lenders into major land owners. The Farm Credit System reported total farmland holdings of approximately 2 million acres at the end of 1986. Farmers Home Administration listed 1.4 million acres of acquired farm acreage last fall. In this report, insurance companies' foreclosed properties have been estimated at 2.7 million acres. If commercial banks have foreclosed at rates similar to the other lenders, farmland inventory for commercial banks would exceed 1 million acres. Together the four major agricultural lending groups held approximately 7 million acres of forfeited farm and ranch land last year. Recently released figures from the Federal Credit System and FHA show lenders inventories continued to expand during the first half of this year.

Farmland inventories held by all creditors are certain to continue to increase in the second half of 1987 as foreclosures initiated last year are completed and new foreclosures continue to be filed. Inventory expansion will be slowed, though, by sale of forfeited land. Estimating the gross amount of land transferred through farm lenders will become increasingly difficult as lenders begin to unload parts of their inventories. For example, the St. Paul district of the Farm Credit System sold 357,000 acres of its 1986 inventory of 540,000 acres last year and is currently aggressively marketing its present inventory of 460,000 acres. The district's figures imply that over 277,000 have been acquired since the mid-1986 sale, bringing total repossessed land to 817,000 acres.

The persistent farmland inventory build-up by farm lenders resembles similar developments during the 1920s and 1930s but on a smaller scale. Fifty years ago insurance companies, as the leading group of farm mortgage lenders, were the most visible holders of repossessed farmland. Farm acreage acquired by insurance companies then greatly exceeded current holdings. In 1930, insurance companies had $2.1 billion invested in farm mortgages. By 1938 farm mortgage investments had been cut in half to $889 million. Foreclosed farm real estate held by the industry peaked at $738 million that year, a level not reached again until five years ago.[5] The national average value of a farm acre in 1938 was $30, suggesting farm acreage owned by insurance companies probably peaked at more than 24 million acres.

Twenty-four million acres, however, underestimates total acreage which passed through insurance companies' ownership in the 1920s and 1930s. A study of insurance companies farm lending activities during the Depression in the Corn Belt reported that thirteen insurance companies servicing approximately half of all industry-supplied farm mortgages in the area carried out almost nine thousand farm sales between 1924 and 1937.[6] In 1937 the thirteen companies still owned over 16,000 Corn Belt farms. By loosely extrapolating from the sales figures, forfeited farm acreage held by life insurance companies during the 1920s and 1930s probably exceeded 35 million acres.

The current situation differs from Depression years for several reasons. First, life insurance companies hold a much smaller share of outstanding mortgage debt now than fifty years ago. Second, farm mortgages as a percent of insurance companies' assets were above 10 percent fifty years ago, compared to 2 percent now. Finally, the most significant difference is the extent of the current farm credit crisis. Fifty years ago all farms, as well as the rest of the economy, were facing depressed conditions. Today, about one-third of farmers are in serious financial trouble. While the amount of acreage owned by insurance companies and other agricultural lenders will not reach Depression levels, the eventual redistribution effect will probably be the same. Little of the foreclosed farmland is likely to be reclaimed by the farmers foreclosed upon.

IMPACTS OF INSURANCE COMPANY-OWNED FARMLAND

The accumulation of farmland by insurance companies and other agricultural lenders is one of several developments of the ongoing farm crisis which will have long-lasting effects on farm structure and rural communities. In evaluating consequences of the farm crisis and addressing issues arising from it, several important points should be remembered. Perhaps most important is recognition of the continuing nature of farm financial crisis. Although there are promising signs of relief, the farm sector is still on unsteady ground and the eventual extent of the crisis is uncertain. Above normal farm losses are still occurring and will continue at least through the next several years.

Lack of detailed information on farmland acquired by lenders and on farmers losing their land, should also be acknowledged as a barrier to drawing firm conclusions on the redistribution effects generated by farm transfers through lending institutions. Little is known about the condition of acquired farmland prior to foreclosure and what changes have occurred under lender management. Little is also known about farmers who have been foreclosed upon. Data providing information such as what percentage of forfeited land was farmed by the owners versus renters, or how many foreclosed farmers have lost all versus part of their farms, is needed. Like many farm problems and issues, the issue of lender farmland inventory build-up is complicated by wide variation in farm types, sizes, and inadequate data. The reluctance of lenders to disseminate disaggregate farm holdings data hampers analysis of the issue.

The issue of farmland acquisition by insurance companies and other lenders is but one important dimension of the broader issues of absentee farm ownership and viability of family farms. Absentee farm ownership has been a recurring topic of debate and inquiry for farm groups, researchers, and policy makers due to the dominant role land tenancy plays in determining land use decisions and in shaping economic and social interrelationships within rural communities. The conventional view has always held that a farm system comprised of owner-operated farms is socially optimal. Owner-operators alone are credited with possessing long term planning horizons which produce socially appropriate decisions on land use and conservation while maximizing economic returns. Perhaps the most important asserted attribute of a owner-operated farm system is increased community cohesiveness.

The current mass transfer of farmland from thousands of foreclosed farmers to a limited number of lending institutions differs in degree from other absentee ownership trends but raises many of the same concerns. Included as common concerns raised by all types of absentee farm ownership are: 1) effect on farmland prices and availability, 2) changes in land uses, 3) land stewardship/farm management impacts, 4) increased farm size accompanied by lower farm numbers, and 5) changes in rural communities' economic and social structures.

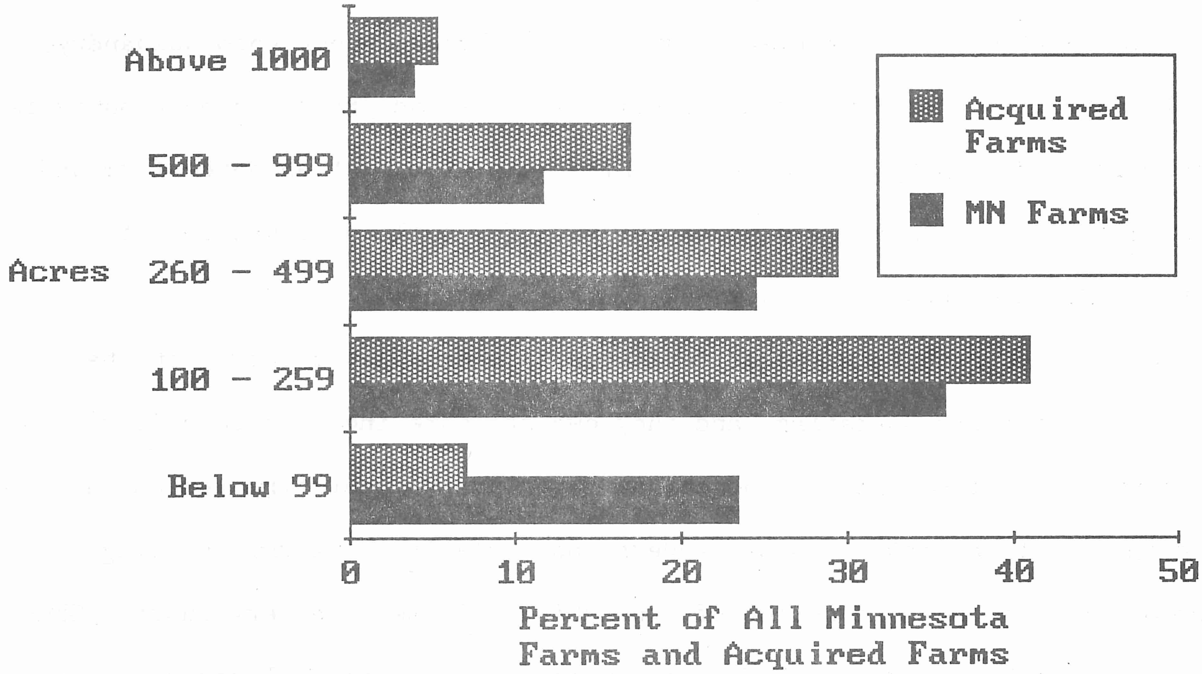
Some of the impacts developing from the forfeited farm inventory build-up are fairly clear while other effects are uncertain due either to inadequate data or dependent upon future developments. Acquired farm acreage has obviously grown large enough to affect local farm real estate markets. In some Midwest counties forfeited farm acreage already exceeds 5 percent of county farm acreage. The rate at which lenders market acquired farm properties will clearly influence land prices in those areas. Insurance companies have recognized this and have, so far, been slow in disposing of their land. Unlike federal land banks or rural banks which have all or most of their loan portfolios invested in agriculture, insurance companies can financially afford to wait for land values to rebound before marketing their properties.

The redistribution of farmland through lenders will certaintly decrease farm numbers and increase farm size, but to what extent is unclear. The eventual decline in farm numbers and subsequent increases in farm size and farmland ownership concentration, directly related to farm foreclosures, will depend not only on the duration of the farm crisis but also on size and tenure status of forfeited farms as well as the tenure arrangements established by farmers or investers purchasing forfeited land.

Some indication of the size of farms transferred to insurance companies is available from a 112 farm sample of forfeited farms in Minnesota. The average size of insurance company-acquired farms was 458 acres, substantially higher than the state's average farm size of 320 acres. The average acquired farm size, however, was skewed by six acquired farms larger than 1,500 acres. The median size of acquired farms was 260 acres, which is still noticeably above the median of approximately 200 acres for all Minnesota farms when farms below 10 acres are excluded.[7] As shown in Figure 6, insurance companies appear to be acquiring a disproportionately higher number of large-size farms based on comparison between the size distribution of all Minnesota farms and acquired farms. This reflects insurance companies' bias for larger loans and perhaps the greater degree of financial problems among larger more highly leveraged farms. The tendency for farms acquired by insurance companies in Minnesota to be large farms suggest the majority of farmers foreclosed upon have lost all or most of their land. Before any more specific observations on the extent and nature of changes occurring in farmland ownership patterns can be made, further information detailing ownership and rental arrangements is needed.

Figure 6

Size Distribution of Minnesota Farms
Acquired by Insurance Companies



The extent of changes in land stewardship and farm management practices occurring on farmland acquired by insurance companies and other lenders is also unknown. A number of cases of severe increases in soil erosion are known to have occurred on insurance company-acquired farms. Soil losses on those farms have dramatically increased due to changes in cropping patterns and destruction of soil conservation practices by insurance companies' tenants. More data on the cropping patterns and soil conservation practices being employed by other tenants on insurance company-acquired farmland are needed, however, before a final judgement on the magnitude of the problem can be drawn.

According to insurance companies, more than 90 percent of farmland transferred to insurance companies is currently leased to local farmers predominantly on a cash rental basis. Soil conservation provisions included in the leases of insurance companies vary from requiring conservation plans to be drawn up with soil conservation offices to clauses about good husbandry. Little enforcement or monitoring of soil conservation practices by tenants is presently conducted by insurance companies. As with most absentee farmland owners, insurance companies espouse the need for soil conservation but do little to insure adequate compliance by their tenants.[8]

Concern over degradation of forfeited farm acreage is rooted in the belief that farmers operating land they own are more inclined to utilize environmentally sound farming practices than farmers operating rented land. In the case of farmland held by lenders, not only is the farmland being rented, but the intended period of ownership by lenders is very short. This presumably creates additional disincentives for adequate soil conservation since neither the tenant nor lender-turned-owner are likely to incorporate long term farm income loss or farm devaluation resulting from sustained soil loss in their farm management decisions.

The degree to which soil erosion is related to land tenure has been a research question since dust bowl days. Several recent studies have supported the view of poorer soil conservation efforts on rental land, while other contemporary studies have rejected this claim. The conflicting findings arise primarily from differing criteria used to judge soil conservation effort and different farm population sizes and regions examined. Evaluating soil conservation management by either comparing soil erosion rates or soil conservation investments on owner-operated versus rented land without adequately allowing for differences in potential soil loss, as some studies have done, raises doubts on the validity of the results. Higher soil erosion may occur on rented land as a result of the land being more erosive as opposed to less conservation effort.

Conflicting conclusions were still reached in two studies in which potential soil erosion was controlled for. In a study of 120 Missouri farms, rental acreage was found to be less susceptible to erosion than owner-operated land, yet had higher erosion rates. The evidence suggested that there were significant differences between conservation management on rented and owner-operated cropland. A nationally based study, after adjusting for differences in erosion potential and erosiveness of crops produced, concluded there was no significant difference in conservation practices on owner-operated and rented land. The study did, however, find evidence of proportionately more production of erosive row crops on rental than owner-operated land.[9] If tenants of insurance company-owned land are converting acreage to more erosive row crops, soil loss may indeed be increasing even if appropriate soil conservation practices are in effect. Increased chemical usage may also be occurring if tenants are switching to row crops.

OUTLOOK FOR INSURANCE COMPANIES FARMLAND ACQUISITIONS

Despite signs of a slowly developing farm turnaround, farm acquisition by insurance companies in 1987, is likely to match last year's volume and will remain high over the next several years. Farm foreclosures initiated by insurance companies fell slightly during the last half of 1986--from 8.2 percent to 7.8 percent of loan volume--but are unlikely to return to 1970s rates soon. Continued financial distress for agricultural lenders can be expected even if the worst is over at the farm level since there is a normal lag between financial stress at the farm level and for creditors. The backlog of farms in foreclosure proceedings alone will be enough to keep the insurance industry's farmland inventory expanding this year. Under the most favorable of future farm market developments, in which 1986-87 is looked back on as the turning point of the farm financial crisis, assignment of farms to insurance companies could easily add another two million acres to inventories over the next few years.

If insurance companies continue to move slowly in selling their acquisitions, farm acreage held by the industry could climb above 6 million acres by 1990. An improving farm economy, however, would probably broaden sales efforts by insurance companies, holding industry inventory below 5 million acres. Farmland redistribution would still be occurring through insurance companies' acquisition and disposition, but would not show if only net farmland inventory changes are considered.

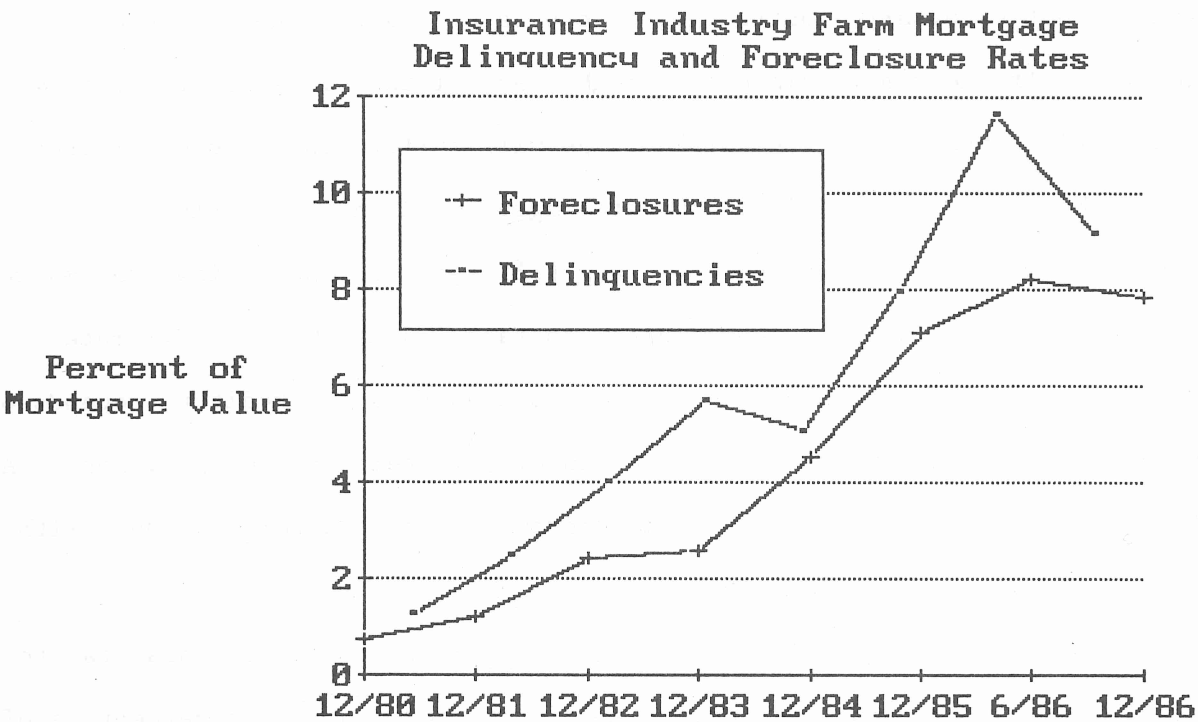
Farmland holdings by insurance companies will peak at around 5 million acres in 1987 or 1988 only if farm problems have genuinely bottomed-out, and a slow recovery, without major reversals, is underway. The most positive recent indications of a recovery are signs of land values stabilizing. Recent Federal Reserve figures report Midwest farmland values may have increased for the first time in five years during the first quarter of 1987. Farm income, bolstered by large federal farm programs, is expected to increase slightly this year, improving farm cash flows. Cash flows are also being boosted by declining costs which have dropped for five straight years. Creditors are reporting fewer problem loans due in part to cash flow improvements, but also related to write-offs of non-performing loans. The number of farmers slipping into serious financial difficulties appears, at least for the time being, to be waning.

Continued reduction in the number of farm failures will occur only if farm conditions do more than just stop deteriorating. Even a slow farm sector recovery is far from certain. Higher interest rates, decreased government farm payments, or poor crop yields could invite a new round of farm failures. Many farm analysts consider the current farm crisis as the first step in a painful, but necessary, contraction of excess U.S. agriculture productive capacity. If their analysis proves right, annual farm loss after the farm credit crisis has passed the crisis stage will still outpace annual losses during the 1970s. Family farm advocates agree with the prediction of lingering farm losses given current farm policies. In their view, the market-oriented farm program will inevitably keep farm loss high. The ultimate extent of farm failures and associated farm transfers to creditors depends on whether the current excess productive capacity is temporary or permanent. And if permanent, on how government farm programs would be altered to deal with sustained losses in farm numbers.

Insurance companies, in general, expect farm foreclosures this year to be down slightly from 1986. Delinquent and foreclosed loans as a percentage of total outstanding farm mortgages appear to have peaked in mid-1986 (as shown in Figure 7). New loan delinquencies continued to fall during the first half of 1987 at most companies, indicating improved financial standing for some of the industry's most distressed farm customers. Still, nearly one out of every twelve farm borrowers serviced by insurance companies in 1986 was either delinquent or being foreclosed on.

Insurance companies' expectations on farmland acquisitions in 1987 are split between slightly less than last year to about the same acreage. Half of the companies expect no net inventory change in 1987 as sales are anticipated to equal acquisitions. Half of the companies are hoping to dispose of most of their inventories over the next two years if market conditions allow. The other companies anticipate that it will take three to five years to dispose of their holdings.[10]

Figure 7



SUMMARY

Farmland inventories held by life insurance companies have rapidly expanded during the farm financial crisis directly as a result of dramatic increases in foreclosures. Insurance company-controlled farm acreage has increased from less than 400,000 acres in 1979 to more than 4 million acres in 1986. Unless insurance companies accelerate farmland marketing efforts, industry-held acreage is likely to exceed 5 million acres within the next two years.

Farm holdings by insurance companies have expanded across the nation but have increased the most in the Midwest where financial stress has been the highest, and past farm investment by insurance companies has been limited. Five insurance companies control 75 percent of total industry farmland inventory. The amount of farmland owned by a company is partially related to volume of farm mortgage lending, but is also affected by foreclosure rate and past farm investment activity.

Increases in farm acreage held by insurance companies and other agricultural lenders have generated public concern over proper land management on forfeited land and the probable effects of the eventual redistribution of the land. As with other forms of absentee farm ownership, lender control of farmland is generally viewed as detrimental to soil conservation and the vitality of rural communities.

This report has established the current extent of farm ownership by insurance companies and likely near term growth. Key issues raised by insurance company ownership have been discussed, but most of the questions raised have been left unanswered. More detailed information on farmland acquired by lenders is required for in-depth analysis of the questions raised. In general, the inventory expansion, while not overwhelming in terms of total acreage, is accelerating the trend towards fewer farms, large size farms, and increased absentee farm ownership.

FOOTNOTES

1. Land values were indexed to 1974 average statewide land values. All average statewide land values used in the report are from the farm real estate value series in Agricultural Land Values and Markets, Situation and Outlook Report, Economic Research Service, United States Department of Agriculture, various issues.

2. Life insurance companies reporting both value and acreage were: John Hancock, Mutual Benefit, Connecticut Mutual, CIGNA, Metropolitan, Phoenix Mutual, and Travelers. Companies reporting only value were: Aetna, Equitable Life Assurance, MONY, Northwestern National, Northwestern Mutual, Kansas City Life, Equitable Assurance of Iowa, and Prudential.

3. For example, Prudential's reported value of 1986 farm holdings in Nebraska was $2.1 million, or an estimated 4,500 acres. An additional 42,000 acres in Nebraska are held by Prudential Group Realty and were not listed in Prudential's annual statement.

4. For more detail see "An Empirical Study of Changes in Farm Mortgage Loan Market Shares Held by Federal Land Banks and Life Insurance Companies," Lindon J. Robison and Ross D. Love, Agricultural Finance Review, Vol. 39, November 1979, United States Department of Agriculture; and "Life Insurance Company Lending to Agriculture," David A. Lins, Agricultural Finance Review, Vol. 41, July 1981, United States Department of Agriculture.

5. Historical farm mortgage and real estate holdings from Life Insurance Factbook, American Council of Life Insurance, 1953.

6. Mortgage Lending Experience in Agriculture, National Bureau of Economic Research, 1954, p. 87.

7. Size distribution of Minnesota farms based on 1982 Census of Agriculture data.

8. Information on soil conservation provisions in insurance company leases and enforcement practices by life insurance companies was collected through telephone interviews with nine life insurance companies.

9. Results of the Missouri study are found in "Soil Erosion Control on Owner-Operated and Rented Cropland," David E. Ervin, Journal of Soil and Water Conservation, Vol. 37, No. 5, September-October 1982. The nationally based study is reported in Cropland Rental and Soil Conservation in the United States, Nelson L. Bills, Agriclutural Economic Report No. 529, Economic Research Service, United States Department of Agriculture, March 1985.

10. Expectations by insurance companies on delinquency and foreclosure rates and on land acquisitions collected through telephone interviews with nine life insurance companies.

APPENDIX A - REFERENCE TABLES

TABLE A1

U.S. FARM REAL ESTATE HELD BY LIFE INSURANCE COMPANIES - BY STATE
(in millions of dollars)

	1969	1974	1979	1984	1986
NORTHEAST					
Connecticut	0.0	0.0	0.0	0.0	1.4
Delaware	0.0	0.0	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0
Maryland	0.0	0.0	0.1	5.1	2.5
Massachusetts	0.0	0.0	0.0	0.0	0.0
New Hampshire	0.0	0.0	0.0	0.0	2.0
New Jersey	0.1	0.0	0.0	0.0	0.0
New York	0.0	0.0	0.0	1.1	1.2
Pennsylvania	0.0	0.1	0.0	0.9	0.4
Rhode Island	0.0	0.0	0.0	0.0	0.0
Vermont	0.0	0.0	0.0	0.0	0.0
TOTAL	0.1	0.1	0.1	7.1	7.5
APPALACHIA					
Kentucky	0.2	0.1	0.0	14.2	27.2
North Carolina	2.0	2.0	20.0	96.7	75.0
Tennessee	0.4	0.4	2.8	21.2	24.2
Virginia	0.7	0.7	0.7	1.0	1.0
West Virginia	0.4	0.0	0.0	0.0	0.0
TOTAL	3.7	3.2	23.5	133.1	127.4
SOUTHEAST					
Alabama	1.0	1.0	1.0	16.5	42.3
Florida	8.9	2.5	5.7	66.4	84.8
Georgia	1.3	1.2	3.4	35.5	38.4
South Carolina	4.0	4.1	4.1	13.9	14.0
TOTAL	15.2	8.8	14.2	132.3	179.5
DELTA STATES					
Arkansas	0.0	1.2	23.0	138.9	107.4
Louisiana	0.0	0.5	0.3	80.1	68.0
Mississippi	0.3	1.4	44.5	166.9	180.0
TOTAL	0.3	3.1	67.8	385.9	355.4
CORN BELT					
Illinois	0.1	1.2	17.3	102.5	127.3
Indiana	0.0	1.7	2.6	119.4	101.1
Iowa	0.0	0.3	0.2	21.1	111.2
Missouri	0.1	0.9	2.4	39.1	88.8
Ohio	1.1	0.0	0.5	71.1	75.1
TOTAL	1.3	4.1	23.0	353.2	503.5

	1969	1974	1979	1984	1986
LAKE STATES					
Michigan	0.0	0.1	0.0	13.5	8.1
Minnesota	0.0	0.5	0.1	33.1	64.1
Wisconsin	0.0	2.0	1.4	3.7	16.8
TOTAL	0.0	2.6	1.5	50.3	89.0
NORTHERN PLAINS					
Kansas	0.0	0.2	0.0	16.4	20.1
Nebraska	0.0	0.1	0.7	18.8	78.8
North Dakota	0.0	0.0	0.0	2.8	7.5
South Dakota	0.0	0.0	0.0	4.8	20.5
TOTAL	0.0	0.3	0.7	42.8	126.9
SOUTHERN PLAINS					
Oklahoma	0.2	0.1	0.2	4.5	17.8
Texas	1.4	5.1	8.4	55.0	71.3
TOTAL	1.6	5.2	8.6	59.5	89.1
MOUNTAIN					
Arizona	6.8	21.0	4.0	2.7	70.2
Colorado	2.2	2.9	13.7	38.2	64.9
Idaho	0.9	1.3	4.0	8.5	13.1
Montana	0.1	0.1	0.0	16.3	78.1
Nevada	0.8	0.9	1.1	5.1	7.7
New Mexico	0.2	0.1	0.1	1.5	2.0
Utah	0.1	1.2	0.7	5.4	4.1
Wyoming	0.0	0.0	0.9	11.0	26.8
TOTAL	11.1	27.5	24.5	88.7	266.9
PACIFIC					
California	2.7	8.7	63.9	281.4	432.3
Oregon	0.1	0.1	12.1	38.5	75.2
Washington	0.1	0.8	1.5	49.5	78.6
TOTAL	2.9	9.6	77.5	369.4	586.1
U.S. TOTAL	36.2	64.5	241.4	1622.3	2331.3

SOURCE: 1969-1984 values from Life Insurance Factbook, American Council of Life Insurance, various years. 1986 values from regular and separate accounts, schedule A, part 1, of annual statements filed by insurance companies with the Minnesota Commerce Department.

TABLE A2

U.S. FARM REAL ESTATE HELD BY LEADING LIFE INSURANCE COMPANIES
(in millions of dollars)

	1982	1983	1984	1985	1986
Aetna	22.6	59.9	74.9	117.2	168.7
CIGNA	37.4	50.5	70.9	68.2	69.5
Connecticut Mutual	11.3	22.7	25.1	30.3	43.8
Equitable Assurance	2.0	11.1	24.6	44.4	91.2
John Hancock	119.0	204.4	265.8	326.9	419.5
Metropolitan	16.2	69.9	113.4	206.5	289.6
MONY	7.1	19.3	38.2	37.6	53.9
Mutual Benefit	3.4	3.0	11.6	31.4	50.1
Northwestern Mutual	19.5	20.4	25.4	26.1	35.7
Phoenix	24.9	33.1	39.0	37.8	47.2
Prudential	466.7	593.9	619.5	754.5	585.3
Travelers	104.8	209.1	250.6	297.9	456.8
Selected Others	21.5	21.5	26.5	15.3	20.0
TOTAL	856.4	1318.8	1585.5	1994.1	2331.3

SOURCE: Regular and separate accounts, schedule A, part 1, of annual statements filed with the Minnesota Commerce Department.

TABLE A3

FARM MORTGAGE LOAN DELINQUENCIES AND FORECLOSURES
BY THE LIFE INSURANCE INDUSTRY

	Number of Foreclosed Farm Loans	Foreclosed Farm Loans by Amount (in millions)
1980	26	18.1
1981	47	55.7
1982	167	170.3
1983	306	247.0
1984	475	289.3
1985	1000	530.2
1986	1654	827.4
TOTAL	3675	2138.0

	Percent of Farm Loan Amount	
	Delinquencies	Foreclosures
12/80	1.28	0.72
12/81	2.49	1.20
12/82	3.99	2.41
12/83	5.67	2.60
12/84	5.04	4.54
12/85	7.95	7.11
12/86	9.18	7.83

SOURCE: "Investment Bulletin," American Council of Life Insurance, No. 981, March 1987.

TABLE A4

ESTIMATED 1986 MIDWEST AND NATIONAL ACREAGE HELD BY LEADING LIFE INSURANCE COMPANIES
(in acres)

	IL	IN	IA	KS	MI	MN	MO	NB	ND	OH	SD	WI	Midwest Total	U.S. Total
Aetna	4,500	17,900	8,800	0	2,700	10,300	12,400	8,900	1,600	9,000	6,800	3,000	85,900	415,000
Connecticut Mutual	0	0	0	0	0	3,200	4,600	1,900	3,000	0	23,600	0	36,300	128,000
CIGNA	9,100	1,300	4,800	17,500	0	1,700	16,800	200	0	1,200	0	0	52,600	215,000
Equitable Assurance	1,700	4,200	7,600	11,300	0	200	18,100	32,600	2,700	1,500	9,500	1,200	90,600	175,000
Hancock	25,400	12,800	15,200	8,400	2,900	8,800	20,200	23,700	0	10,200	15,800	7,100	150,500	590,000
Metropolitan	20,900	18,000	45,300	8,900	0	13,600	12,400	48,100	10,900	11,100	46,000	0	235,200	510,000
MONY	2,100	300	2,400	1,000	100	1,500	28,500	6,200	0	0	0	3,400	45,500	86,000
Mutual Benefit	1,100	1,800	15,800	0	0	2,000	14,600	0	0	5,700	0	0	41,000	47,000
Northwestern Mutual	0	0	0	1,600	400	2,900	0	2,700	0	0	15,900	0	23,500	50,000
Phoenix	11,100	6,200	4,500	700	100	1,800	14,300	400	0	6,500	0	1,000	46,600	46,900
Prudential	17,000	27,200	800	600	0	1,300	1,600	46,500	0	16,700	1,100	300	113,100	954,300
Travelers	15,000	5,200	16,700	16,700	2,800	34,800	17,900	65,400	3,400	5,300	8,800	4,700	196,700	885,000
Selected Others	600	600	1,900	1,900	0	2,500	1,000	0	3,100	300	0	0	11,900	28,000
TOTAL	108,500	95,500	123,800	68,600	9,000	84,600	162,400	236,600	24,700	67,500	127,500	20,700	1,129,400	4,130,200

TABLE A5

U.S. FARM FORECLOSURES - LOAN AMOUNT BY LEADING LIFE INSURANCE COMPANIES
(in millions of dollars)

	1982	1983	1984	1985	1986
Aetna	19.2	39.2	15.1	43.6	56.1
CIGNA	29.8	13.0	25.1	23.2	54.7
Connecticut Mutual	0.0	1.4	9.1	12.3	19.6
Equitable Assurance	1.5	9.4	17.6	21.5	55.6
John Hancock	38.5	62.1	77.7	200.0	122.3
Kansas City Life	0.0	0.1	0.7	0.9	11.9
Metropolitan	1.9	11.2	33.5	68.6	84.9
MONY	5.1	13.5	16.1	14.3	37.7
Mutual Benefit	0.3	0.2	9.4	23.0	21.9
Northwestern Mutual	0.0	5.3	3.8	3.8	19.2
Phoenix	3.0	0.7	18.5	20.6	8.0
Prudential	3.7	34.4	16.3	60.6	75.1
Travelers	38.3	23.5	43.7	51.1	172.7
TOTAL	141.3	214.0	286.6	543.5	739.7
INDUSTRY TOTAL	170.3	247.0	289.3	530.2	827.5

SOURCE: Regular and separate accounts, schedule B, part 3, of annual statements filed with the Minnesota Commerce Department. Industry total from "Investment Bulletin," American Council of Life Insurance, No. 981, March 1987.

TABLE A6

U.S. FARM REAL ESTATE MORTGAGES - LOAN AMOUNT
BY LEADING LIFE INSURANCE COMPANIES
(in millions of dollars)

	1982	1983	1984	1985	1986
Aetna	430	388	598	518	430
CIGNA	684	641	604	587	512
Connecticut Mutual	472	445	427	390	365
Equitable Assurance	1792	1721	1625	1659	1655
Kansas City Life	82	73	63	55	49
John Hancock	2149	2161	2049	1870	1578
Metropolitan	1897	1958	1904	1784	1606
MONY	394	380	345	304	257
Mutual Benefit	361	369	378	397	410
Northwestern Mutual	350	317	294	236	214
Phoenix	131	123	111	102	87
Prudential	1905	1726	1800	1452	1238
Travelers	1712	1839	1835	1945	1974
TOTAL	12359	12141	12033	11299	10375

SOURCE: Regular and separate accounts, Schedule B, part 1, of annual statements filed with the Minnesota Commerce Department.

TABLE A7

FARM REAL ESTATE HELD BY LEADING INSURANCE COMPANIES AS A PERCENTAGE OF STATE FARM VALUATION

	(in millions of dollars)		
	1986 Insurance Holdings	1986 Total State Farm Valuation	Percent Held by Industry
NORTHEAST			
Connecticut	1.4	1,675	0.1
Delaware	0.0	1,142	0.0
Maine	0.0	1,509	0.0
Maryland	2.5	5,001	a
Massachusetts	0.0	1,871	0.0
New Hampshire	2.0	889	0.2
New Jersey	0.0	3,717	0.0
New York	1.2	7,582	a
Pennsylvania	0.4	12,612	a
Rhode Island	0.0	282	0.0
Vermont	0.0	1,888	0.0
TOTAL	7.5	38,168	a
APPALACHIA			
Kentucky	27.2	12,612	0.2
North Carolina	75.0	12,206	0.6
Tennessee	24.2	13,290	0.2
Virginia	1.0	10,997	a
West Virginia	0.0	1,881	0.0
TOTAL	127.4	50,986	0.2
SOUTHEAST			
Alabama	42.3	8,755	0.5
Florida	84.8	18,660	0.5
Georgia	38.4	11,094	0.3
South Carolina	14.0	4,796	0.3
TOTAL	179.5	43,305	0.4
DELTA STATES			
Arkansas	107.4	11,275	1.0
Louisiana	68.0	10,148	0.7
Mississippi	180.0	10,671	1.7
TOTAL	355.4	32,094	1.1
CORN BELT			
Illinois	127.3	32,809	0.4
Indiana	101.1	17,344	0.6
Iowa	111.2	28,243	0.4
Missouri	88.8	18,673	0.5
Ohio	75.1	16,012	0.5
TOTAL	503.5	113,081	0.4

	(in millions of dollars) 1986 Insurance Holdings	1986 Total State Farm Valuation	Percent Held by Industry
LAKE STATES			
Michigan	8.1	10,674	0.1
Minnesota	64.1	18,514	0.3
Wisconsin	16.8	12,593	0.1
TOTAL	89.0	41,781	0.2
NORTHERN PLAINS			
Kansas	20.1	18,565	0.1
Nebraska	78.8	17,185	0.5
North Dakota	7.5	12,957	0.1
South Dakota	20.5	9,568	0.2
TOTAL	126.9	58,275	0.2
SOUTHERN PLAINS			
Oklahoma	17.8	15,876	0.1
Texas	71.3	73,760	0.1
TOTAL	89.1	89,636	0.1
MOUNTAIN			
Arizona	70.2	8,646	0.8
Colorado	64.9	12,270	0.5
Idaho	13.1	9,469	0.1
Montana	78.1	12,438	0.6
Nevada	7.7	1,753	0.4
New Mexico	2.0	6,015	0.0
Utah	4.1	5,545	0.1
Wyoming	26.8	5,359	0.5
TOTAL	266.9	61,495	0.4
PACIFIC			
California	432.3	51,518	0.8
Oregon	75.2	9,380	0.8
Washington	78.6	13,240	0.6
TOTAL	586.1	74,138	0.8
U.S. TOTAL	2,331.3	602,959	0.4

a = less than .1 percent

SOURCE: Company holdings values from regular and separate accounts, schedule A, part 1, of annual statements filed with the Minnesota Commerce Department. Statwide farm valuations from Agricultural Land Values and Markets, Outlook and Situation Report, Economic Research Service, U.S.D.A., June 1986.

TABLE A8

FARM REAL ESTATE HELD BY LEADING INSURANCE COMPANIES
AS A PERCENTAGE OF STATE FARM ACREAGE

	(in thousands of acres)		
	1986 Estimated Insurance Acreage	1985 Total State Farm Acreage	Percent Held by Industry
NORTHEAST			
Connecticut	0.4	500	0.1
Delaware	0.0	700	0.0
Maine	0.0	1,600	0.0
Maryland	1.3	2,700	a
Massachusetts	0.0	700	0.0
New Hampshire	1.2	600	0.2
New Jersey	0.0	1,000	0.0
New York	1.5	9,400	a
Pennsylvania	0.3	8,700	a
Rhode Island	0.0	100	0.0
Vermont	0.0	1,700	0.0
TOTAL	4.7	27,700	a
APPALACHIA			
Kentucky	31.1	14,500	0.2
North Carolina	66.4	11,000	0.6
Tennessee	24.4	13,400	0.2
Virginia	0.9	9,700	a
West Virginia	0.0	3,800	0.0
TOTAL	122.8	52,400	0.2
SOUTHEAST			
Alabama	55.6	11,500	0.5
Florida	59.1	13,000	0.5
Georgia	46.7	13,500	0.3
South Carolina	16.1	5,600	0.3
TOTAL	177.5	43,600	0.4
DELTA STATES			
Arkansas	152.3	16,100	0.9
Louisiana	67.7	10,100	0.7
Mississippi	239.4	14,200	1.7
TOTAL	459.4	40,400	1.1
CORN BELT			
Illinois	108.5	28,700	0.4
Indiana	95.5	16,400	0.6
Iowa	123.8	33,600	0.4
Missouri	162.4	31,000	0.5
Ohio	67.5	15,800	0.4
TOTAL	557.7	125,500	0.4

	(in thousands of acres) 1986 Estimated Insurance Acreage	1985 Total State Farm Acreage	Percent Held by Industry
LAKE STATES			
Michigan	9.0	11,400	0.1
Minnesota	84.6	30,400	0.3
Wisconsin	20.7	18,000	0.1
TOTAL	114.3	59,800	0.2
NORTHERN PLAINS			
Kansas	68.6	48,000	0.1
Nebraska	236.6	47,200	0.5
North Dakota	24.7	41,000	0.1
South Dakota	127.5	44,500	0.3
TOTAL	457.4	180,700	0.3
SOUTHERN PLAINS			
Oklahoma	46.3	33,000	0.1
Texas	164.7	136,800	0.1
TOTAL	211.0	169,800	0.1
MOUNTAIN			
Arizona	379.3	37,500	1.0
Colorado	227.2	34,600	0.7
Idaho	26.4	14,700	0.2
Montana	461.8	61,100	0.8
Nevada	48.4	8,900	0.5
New Mexico	18.7	45,800	0.0
Utah	10.7	11,800	0.1
Wyoming	217.5	34,800	0.6
TOTAL	1390.0	249,200	0.6
PACIFIC			
California	334.0	33,000	1.0
Oregon	180.4	18,000	1.0
Washington	121.0	16,100	0.8
TOTAL	635.4	67,100	0.9
U.S. TOTAL	4,130.2	1,016,200	0.4

a = less than .1 percent

SOURCE: State farm acreage from Farm Real Estate Historical Series Data, 1950-1985, Economic Research Service, U.S.D.A., Station Bulletin #738, December 1985.

TABLE A9

SHARE OF TOTAL FARM REAL ESTATE DEBT HELD BY LIFE INSURANCE COMPANIES

	(in percents)		(in millions of dollars)	
	1930	1984	1984 Insurance Held Farm Mortgages	1984 Total Farm Mortgages
NORTHEAST				
Connecticut	a	1.5	2.0	133.6
Delaware	0.5	0.7	1.2	165.7
Maine	a	0.5	0.8	170.2
Maryland	1.4	3.1	22.4	726.3
Massachusetts	a	0.4	0.5	132.8
New Hampshire	0.0	7.9	5.4	68.1
New Jersey	0.4	0.8	2.7	331.5
New York	0.1	2.2	27.7	1264.4
Pennsylvania	a	1.8	30.0	1665.9
Rhode Island	0.0	0.0	0.0	16.1
Vermont	a	0.7	1.6	217.7
TOTAL	0.3	1.9	94.3	4892.3
APPALACHIA				
Kentucky	22.7	7.4	173.6	2334.0
North Carolina	10.9	3.6	80.3	2237.9
Tennessee	33.0	4.3	72.2	1682.5
Virginia	7.8	3.3	42.5	1305.2
West Virginia	1.8	4.4	11.1	254.2
TOTAL	18.3	4.9	379.7	7813.8
SOUTHEAST				
Alabama	9.1	7.4	100.7	1362.2
Florida	4.4	21.9	622.6	2842.6
Georgia	25.5	8.8	214.8	2452.3
South Carolina	10.1	2.6	25.8	986.5
TOTAL	13.9	12.6	963.9	7643.6
DELTA STATES				
Arkansas	16.4	17.4	375.8	2160.2
Louisiana	14.1	11.6	214.2	1840.1
Mississippi	21.1	14.2	296.1	2083.5
TOTAL	17.2	14.6	886.1	6083.8
CORN BELT				
Illinois	29.6	11.9	757.7	6373.7
Indiana	36.7	10.3	473.5	4610.0
Iowa	41.9	10.8	949.1	8765.1
Missouri	32.9	10.8	423.8	3931.9
Ohio	21.7	9.0	276.6	3071.1
TOTAL	34.9	10.8	2880.7	26751.8

	(in percents) 1930	1984	(in millions of dollars) 1984 Insurance Held Farm Mortgages	1984 Total Farm Mortgages
LAKE STATES				
Michigan	3.7	3.0	76.0	2508.5
Minnesota	29.2	7.1	415.0	5804.4
Wisconsin	4.6	3.4	134.1	3923.3
TOTAL	14.4	5.1	625.1	12236.2
NORTHERN PLAINS				
Kansas	36.5	9.4	359.2	3805.4
Nebraska	28.7	15.7	671.0	4285.9
North Dakota	14.2	2.4	57.8	2409.0
South Dakota	39.2	6.4	133.2	2094.0
TOTAL	30.5	9.7	1221.2	12594.3
SOUTHERN PLAINS				
Oklahoma	26.2	6.2	174.7	2805.1
Texas	24.0	14.1	914.6	6492.8
TOTAL	24.6	11.7	1089.3	9297.9
MOUNTAIN				
Arizona	5.2	30.4	223.5	736.1
Colorado	5.0	14.6	368.0	2512.0
Idaho	12.2	13.3	263.4	1986.7
Montana	8.6	16.3	413.4	2528.7
Nevada	3.1	27.8	87.6	315.1
New Mexico	10.6	13.3	104.9	789.3
Utah	3.5	0.7	1.6	217.7
Wyoming	1.0	19.9	137.2	688.5
TOTAL	6.9	16.4	1599.6	9774.1
PACIFIC				
California	3.7	21.6	1996.6	9260.2
Oregon	10.4	9.6	217.0	2261.9
Washington	15.2	18.4	434.4	2364.7
TOTAL	6.6	19.1	2648.0	13886.8
U.S. TOTAL	22.0	11.2	12387.9	110974.6

a = less than .1 percent

SOURCE: Percent of 1930 farm mortgages held by insurance companies from Mortgage Lending Experience in Agriculture, National Bureau of Economic Research, 1954, p. 41. Total farm mortgages from Farm Real Estate Historical Series Data, 1950-1985, Economic Research Service, U.S.D.A., Station Bulletin #738, December 1985. Insurance held mortgages from Life Insurance Factbook, American Council of Life Insurance, 1985.

TABLE A10

FARM MORTGAGES AND FORECLOSURES IN 1986
BY LEADING INSURANCE COMPANIES - BY STATE
(in millions of dollars)

	Farm Foreclosures		Farm Mortgages	
	Numbers	Amount	Numbers	Amount
NORTHEAST				
Connecticut	0	0.0	4	1.5
Delaware	0	0.0	12	1.1
Maine	0	0.0	0	0.0
Maryland	1	0.7	69	19.5
Massachusetts	0	0.0	1	0.5
New Hampshire	0	0.0	3	4.0
New Jersey	1	0.2	29	2.1
New York	2	0.5	123	19.4
Pennsylvania	0	0.0	286	24.1
Rhode Island	0	0.0	10	0.1
Vermont	0	0.0	3	1.4
TOTAL	4	1.4	540	73.7
APPALACHIA				
Kentucky	13	7.0	762	176.9
North Carolina	5	5.9	212	42.4
Tennessee	10	3.5	276	49.3
Virginia	0	0.0	133	31.3
West Virginia	0	0.0	13	10.0
TOTAL	28	16.4	1,396	309.9
SOUTHEAST				
Alabama	7	5.5	219	78.7
Florida	3	1.1	564	563.2
Georgia	15	5.2	375	172.1
South Carolina	1	1.1	95	25.9
TOTAL	26	12.9	1,253	839.9
DELTA STATES				
Arkansas	49	29.2	1,489	296.3
Louisiana	12	17.9	400	189.4
Mississippi	34	27.9	897	217.0
TOTAL	95	75.0	2,786	702.7
CORN BELT				
Illinois	97	41.8	4,699	605.7
Indiana	69	26.5	2,925	382.8
Iowa	340	71.8	8,398	757.2
Missouri	154	45.8	2,541	291.4
Ohio	54	18.0	1,413	192.9
TOTAL	714	203.9	19,976	2,230.0

	Farm Foreclosures		Farm Mortgages	
	Numbers	Amount	Numbers	Amount
LAKE STATES				
Michigan	3	1.2	357	63.4
Minnesota	146	26.5	3,239	328.3
Wisconsin	27	11.2	422	105.3
TOTAL	176	38.9	4,018	497.0
NORTHERN PLAINS				
Kansas	35	11.8	3,509	274.3
Nebraska	141	37.3	5,348	544.5
North Dakota	4	3.6	290	46.5
South Dakota	24	14.0	832	94.8
TOTAL	204	66.7	9,979	960.1
SOUTHERN PLAINS				
Oklahoma	12	7.1	1,377	138.1
Texas	67	51.3	2,617	732.5
TOTAL	79	58.4	3,994	870.6
MOUNTAIN				
Arizona	0	0.0	284	152.7
Colorado	45	47.2	1,340	280.0
Idaho	11	8.3	1,081	238.5
Montana	40	45.2	877	301.3
Nevada	1	0.5	97	85.6
New Mexico	2	1.3	320	74.7
Utah	2	1.1	79	13.7
Wyoming	5	3.4	305	110.0
TOTAL	106	107.0	4,383	1,256.5
PACIFIC				
California	92	110.0	2,871	1,851.0
Oregon	11	21.3	495	410.7
Washington	13	27.8	1,643	373.0
TOTAL	116	159.1	5,009	2,634.7
U.S. TOTAL	1,548	739.7	53,334	10,375.1

SOURCE: Regular and separate accounts, schedules A and B, of annual statements filed with the Minnesota Commerce Department.

Center for Urban and Regional Affairs

University of Minnesota
330 Hubert H. Humphrey Center
301 19th Avenue South
Minneapolis, Minnesota 55455
(612) 625-1551